

PREMATRRITAL SCREENING & COUNSELING

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وجعل

بينكم

مودعة ور حمة



بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ
وَمِنْ آيَاتِهِ أَنْ خَلَقَ لَكُمْ
مِنْ أَنْفُسِكُمْ أَزْوَاجًا
لِتَسْكُنُوا إِلَيْهَا وَجَعَلَ
بَيْنَكُمْ مَوَدَّةً وَرَحْمَةً إِنَّ
فِي ذَلِكَ لَآيَاتٍ لِقَوْمٍ يَتَفَكَّرُونَ

LEARNING OBJECTIVES



Premarital Screening
and Counseling

- *Define Pre-marital screening*
- *Discuss PMS practice & implementation in KSA*
- *Discuss approach to pre-marital couples*



CONTENT



Premarital Screening
and Counseling

- ❑ **DEFINITIONS**
- ❑ **IMPORTANCE**
- ❑ **PMS in KSA**
- ❑ **IMPLEMENTATION**
- ❑ **APPROACH TO THE
PREMARITAL COUPLES**



SCREENING



Premarital Screening
and Counseling

- Early detection of asymptomatic patients as well as identification of risk factors that puts individual at higher risk of developing disease.

Types of screening :

- Mass
- Targeted
- Case finding / opportunistic

SCREENING



Premarital Screening
and Counseling

Factors appropriate for screening :

- Important health problem
- High prevalence
- Long latent period (asymptomatic)
- Natural history understood
- Early detection improves prognosis

COUNSELING



Premarital Screening
and Counseling

- Definition :

“The skilled and principled use of relationship to facilitate **self- knowledge, emotional acceptance** and **growth** and the optimal development of **personal resources**”

- The overall aim is to helping the patients understand and accept themselves “as they are”, And counseling is to help the patient to help himself

INTRODUCTION



Premarital Screening
and Counseling

- Marriage is considered a remarkable event in the individuals' lives, as they work on starting a family
- The injury of any of the family members with **hereditary** and **infectious** diseases leads to foul the pleasure of life and several psychological, social, and economic problems.

INTRODUCTION



Premarital Screening
and Counseling

Definition of the Healthy Marriage:

State of agreement and harmony between the marriage partners with regard to the healthy, psychological, sexual, social, and legislative aspects, aiming at making a sound family and begetting healthy, happy children.





Premarital Screening Program in Saudi Arabia

DEFINITION & IMPLEMENTATION



الفحص الطبي قبل الزواج

The Royal Decree no. 3 Issued on 6/11/1424 stated:

“For Screening of genetic diseases , the premarital examination for both couples is recommended. A certificate of examination to be issued before wedding. The results of examination to be explained to the concerned but not to prevent marriage.”

- أصدر مجلس الوزراء في جلسته المنعقدة في السادس من شهر ذي القعدة 1424 هـ قراره القاضي بتطبيق الفحص الطبي قبل الزواج على السعوديين والزّام طرفي العقد باحضار شهادة الفحص الطبي قبل إجراء عقد النكاح، ويكون تطبيق ذلك ابتداء من 1 / 1 / 1425 هـ
- أن يكون هذا الإجراء أحد متطلبات تدوين العقد مع ترك حرية إتمام الزواج لصاحبي العقد بصرف النظر عن نتيجة الفحص الطبي سلباً كانت أم إيجاباً.

OVERVIEW



Premarital Screening
and Counseling

Definition of Premarital Screening:

- Conducting examination for soon-to-be married in order to identify if there is genetic blood diseases such as **sickle-cell anemia (SCA)** and **Thalassemia**, and some infectious diseases such as **hepatitis B, C** and **HIV**.



OVERVIEW



Premarital Screening
and Counseling

It includes:

- ✓ the commonest two hereditary hemoglobinopathies in KSA:
 - No cure for both conditions despite advanced medical technology
 - Costly patient care !!
- ✓ Some STDs Infections

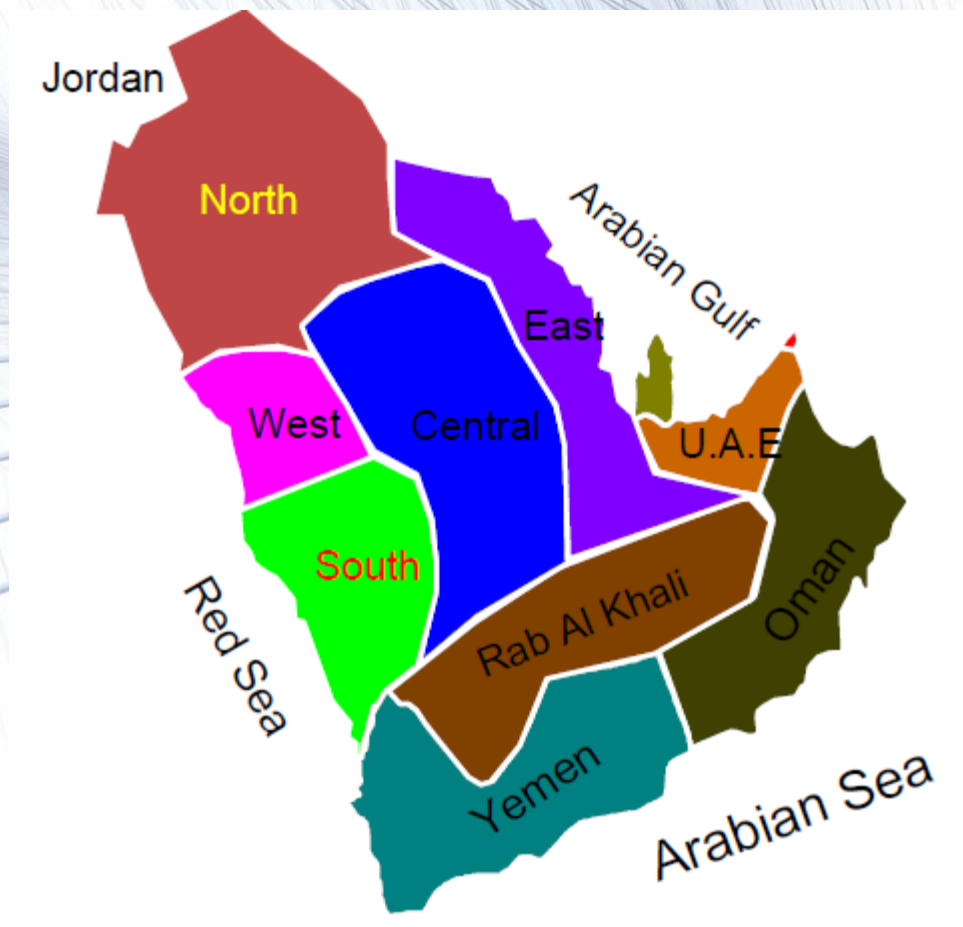


OVERVIEW



Premarital Screening
and Counseling

Prevalence of SCA & Thalassemia



Objectives of the Premarital Screening



Premarital Screening
and Counseling

- Limiting the spread of some genetic blood diseases **sickle-cell anemia (SCA) and thalassemia**, and some infectious diseases: **hepatitis B, C and AIDS/HIV**.
- Reducing the financial burdens resulting from the treatment
- Reducing pressure over health institutions and blood banks.
- Avoiding the social and psychological problems for families whose children are suffering.
- Making those seeking such check-up feel at ease.
- Disseminating awareness with regard to the concept of the comprehensive, healthy marriage.

Flowchart - Premarital Screening Program



RECEPTION CENTER

- Data recording
- Sampling



APPROVED LABAROTORY

- Blood sampling analysis
- Issuing the results for the normal persons within 7-10 days

GENETIC COUNSELING SERVICES

- If both couples are carriers or diseased
- If one is normal and the other is carrier or diseased, there is no need for referral to genetic counseling.



WEDDING AUTHORITY



CONSTRAINTS



Premarital Screening
and Counseling

- Occasional lack of lab reagents
- Insufficient lab machines
- Shortage of manpower
- Late & imprecise reporting
- Difficulty in following non-compatible couples if they get married or not

MOH Efforts



Premarital Screening
and Counseling

- Lab supplies
- Comprehensive work guidelines
- Educational / community campaigns
- Training (physicians, coordinators, data recorder)
- PSP at other health facilities



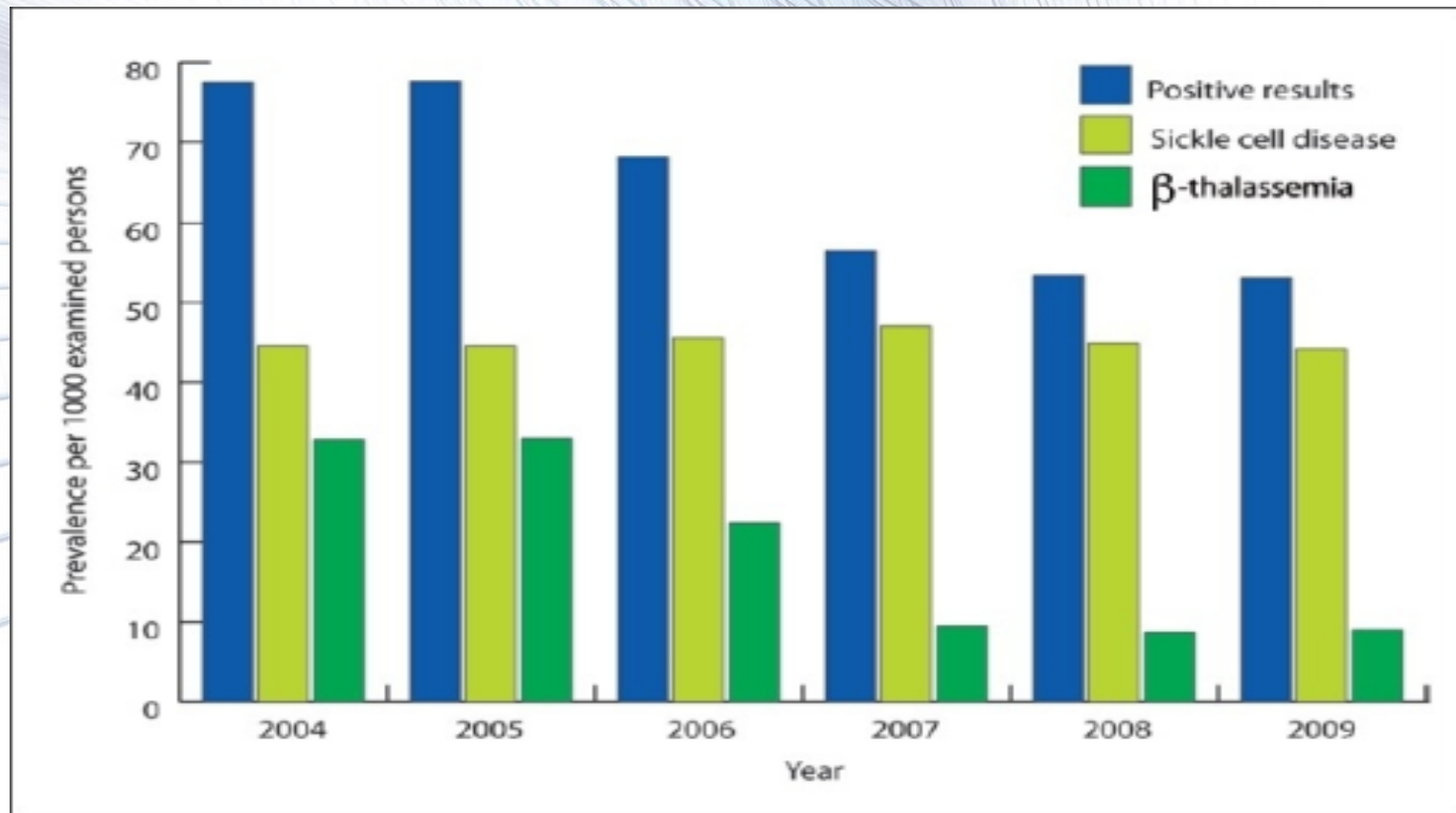
وزارة الصحة
Ministry of Health

IMPLEMENTATION OF PMS in KSA



Premarital Screening
and Counseling

Hemoglobinopathies

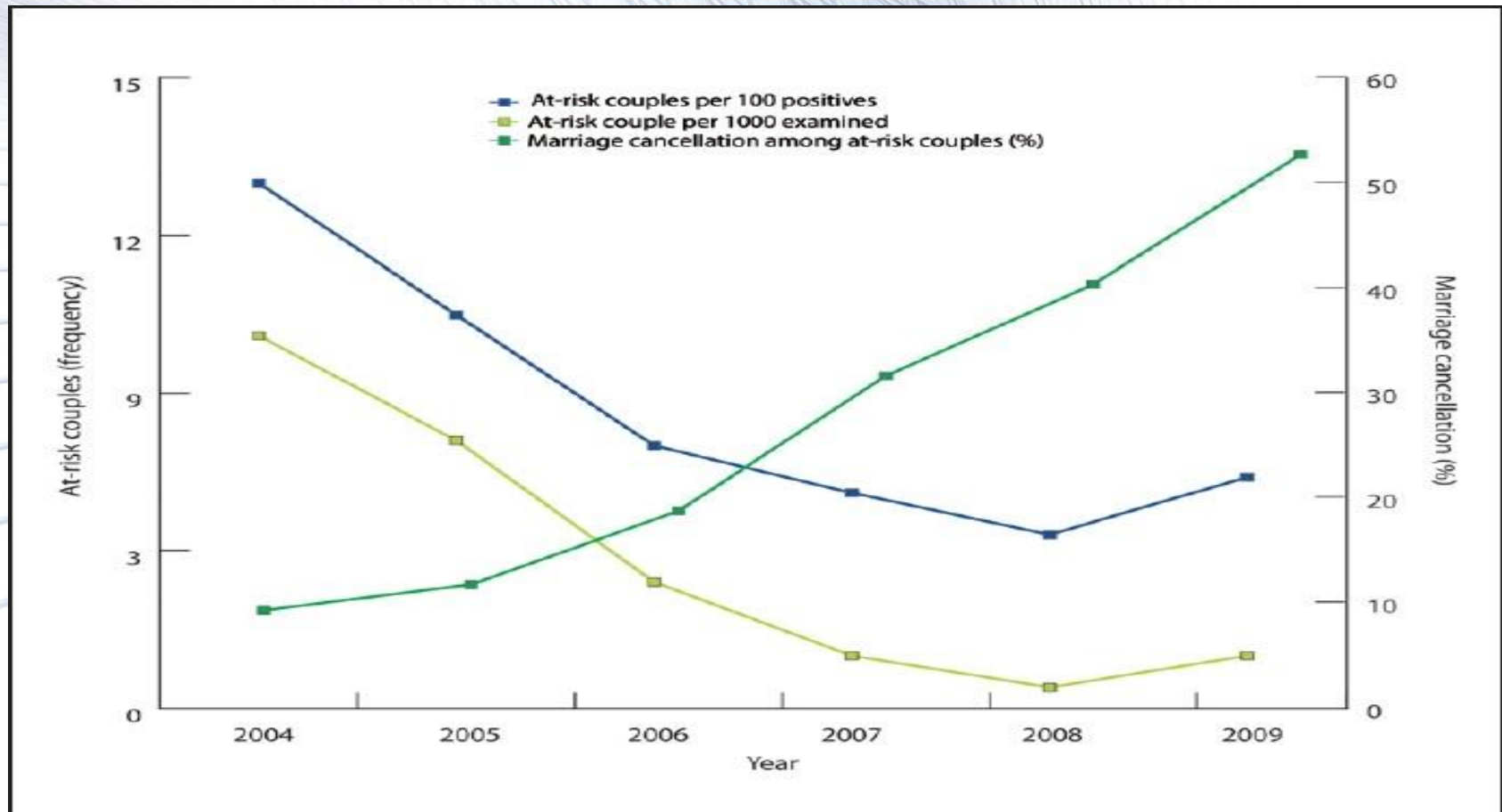


IMPLEMENTATION OF PMS in KSA



Premarital Screening
and Counseling

Hemoglobinopathies



IMPLEMENTATION OF PMS in KSA



Premarital Screening
and Counseling

Hepatitis B & C

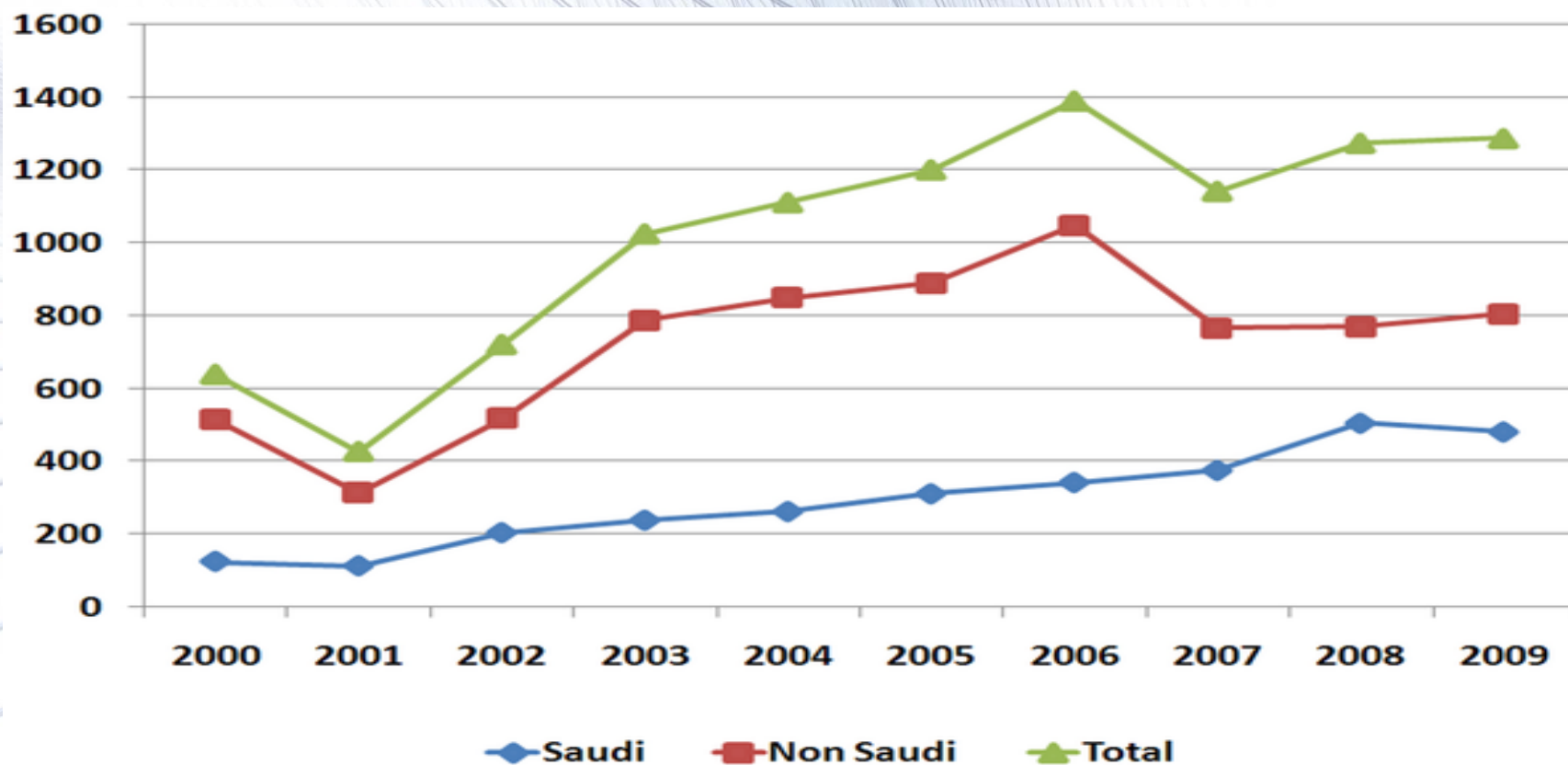
Disease	2005		2006		2007		2008		2009		2010		2011	
	Cases	Incidence	Cases	Incidence	Cases	Incidence	Cases	Incidence	Cases	Incidence	Cases	Incidence	Cases	Incidence
Hepatitis A	2461	10.64	2631	11.12	1383	5.70	1678	6.77	1258	4.96	616	2.38	321	1.13
Hepatitis B	4209	18.20	4264	18.02	4501	18.57	5066	20.43	5020	19.78	4854	18.72	4494	15.84
Hepatitis C	2674	11.56	2964	12.53	2776	11.45	2733	11.02	2487	9.80	2448	9.44	2328	8.20

IMPLEMENTATION OF PMS in KSA



Premarital Screening
and Counseling

HIV/AIDS



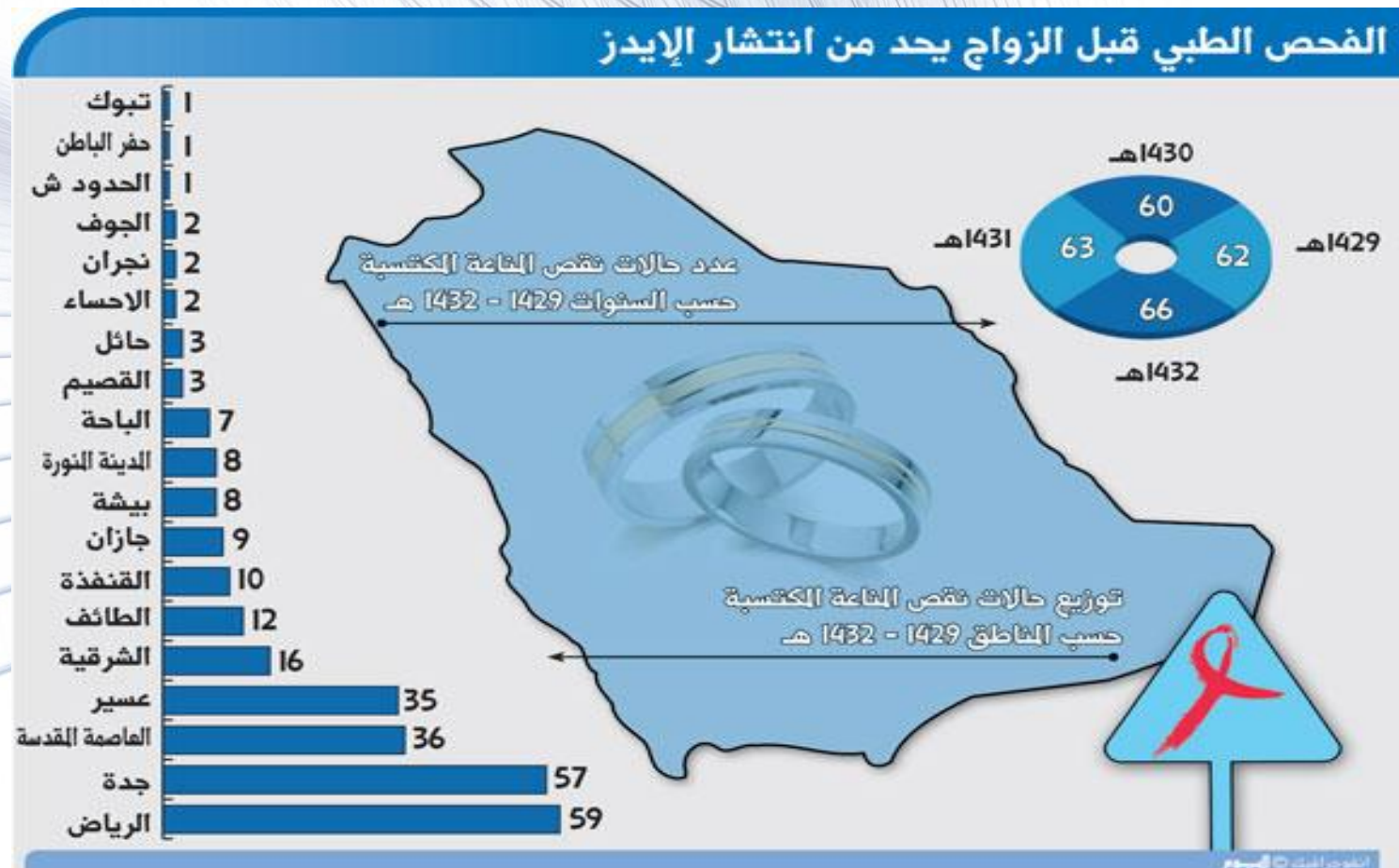
Mazroa MAAl, Kabbash IA, Felemban SM, Stephens GM, et al. (2012) HIV Case Notification Rates in the Kingdom of Saudi Arabia over the Past Decade (2000–2009). PLoS ONE 7(9): e45919. doi:10.1371/journal.pone.0045919
<http://www.plosone.org/article/info:doi/10.1371/journal.pone.0045919>



Premarital Screening
and Counseling

IMPLEMENTATION OF PMS in KSA

HIV/AIDS

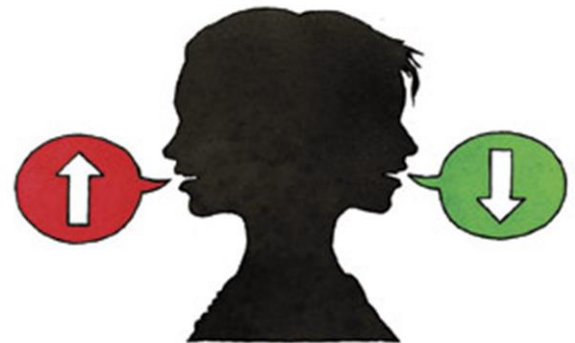


Common Misbeliefs



Premarital Screening
and Counseling

- PMS is indicated for related couples only
- Screen wide range of genetic/metabolic disease
- Negative results means healthy offspring
- Non-compatible results can stop marriage



Future of National PMS



Premarital Screening
and Counseling

الرياض

جريدة يومية تصدر عن مؤسسة اليمامة الصحفية

الخميس 22 ربيع الأول 1435 - 23 يناير 2014م - العدد 16649

الإجراء الحالي يترك الخيار للطرفين بالارتباط من عدمه
نتائج فحص ما قبل الزواج.. متى تكون ملزمة؟



الدخول والأرشيف | نسخة الجوال

الوطن
أون لاين
al-watan

الرئيسية السياسة المحليات الاقتصاد الثقافة الرياضة حياة

حياة

إدراج الأمراض النفسية و"المخدرات" في "فحص الزواج"

3 جهات تعمل على تطوير لائحة مقترحة.. والهدف حماية المجتمع

جدة: نجلاء الحربي 2014-01-05 12:11 AM

تعكف ثلاث جهات حكومية على تطوير برنامج فحص ما قبل الزواج، من خلال إدخال فحوصات جديدة وزيادة عدد الأمراض التي يجري البحث عنها ضمن البرنامج المعمول به في الوقت الراهن، والذي يلزم المقبلين على الزواج لإجرائه واحضار شهادة بذلك تفيد بالخلو من الأمراض قبل إجراء عقد النكاح. وتشمل اللائحة التطويرية المقترحة لبرنامج فحص ما قبل الزواج إدخال فحص المخدرات، والأمراض النفسية، والدرن، ويضاف إليها ما يستجد من الأمراض الأكثر

Community Response to PMS



مواطنون يقبلون على الفحص الطبي قبل الزواج في الأحساء
«الشرق الأوسط»



جديد للمقبلين والمقبلات على الزواج!
مركز مطمئنة يقدم:
الفحص النفسي قبل الزواج

- مقاييس نفسية للعروسين تقيم فرص التوافق الزوجي.
- التأهيل النفسي للمقبلين على الزواج.

اضغط هنا لمزيد من التفاصيل

مركز مطمئنة الطبي
الرياض 00966 1 2296669
00966 6 321prpfz@alhabeeb.com





APPROACH TO THE PREMARITAL COUPLES

Case Scenario

- Layla is 25 year old Saudi, teacher , Not known to have any medical illness.
- She & her cousin attends for premarital check-up
- Her main concern is the chance of having genetic diseases in the children.
- **What is your approach ?**



COMPONENTS OF PREMARITAL PACKAGE



Premarital Screening
and Counseling

Premarital service is unique opportunity for improving reproductive health & preventing genetic/infectious disease.

- **Advocating premarital package**
- **Premarital history & examination**
- **Premarital investigation**
- **Premarital counseling**
- **Premarital immunization**
- **Registration & Recordkeeping**



COMPONENTS OF PREMARITAL PACKAGE



Advocating premarital package

Tell the couples about:

- Men & women are equal partners in child reproduction & child rearing
- The importance of PMS as preventive measure
- The procedures of PMS emphasizing the confidentiality of information & privacy of examination

COMPONENTS OF PREMARITAL PACKAGE



Premarital History & Examination

Ask about :

- Consanguinity or any familial disease
- Medical disease: DM , STDs....
- Previous operations
- Menstrual history (age, regularity, duration , pain , vaginal discharge)
- Immunization history
- Social history

COMPONENTS OF PREMARITAL PACKAGE



Premarital History & Examination

- Perform general examination looking for:
 - Signs of general disease
 - Signs of endocrine disturbance
- Abdominal examination
- Genital examination

COMPONENTS OF PREMARITAL PACKAGE



Premarital Screening
and Counseling

Premarital screening

- CBC
- Hgb electrophoresis
- Sickling test
- HBs Ag (ELISA)
- Anti HCV (ELISA)
- HIV-Ag & Anti- HIV

COMPONENTS OF PREMARITAL PACKAGE



Premarital Screening
and Counseling

Premarital investigations (if indicated)

- Rh grouping
- VDRL for syphilis
- Semen analysis
- Pelvic ultrasound or hormonal analysis for female

COMPONENTS OF PREMARITAL PACKAGE



Premarital Counseling

- Explain the basic issues related to marriage:
 - Anatomical facts concerning the male & female genital organs
 - Reproductive physiology
 - Family planning methods suitable for newly wed
 - 3 – 5 years between children is the best spacing for mother & child health

COMPONENTS OF PREMARITAL PACKAGE



Premarital Screening
and Counseling

Premarital Counseling

- Help the couples to discuss their thoughts & fears freely
- Provide information about the wedding night
- Reassure the couple & alleviate all worries & concerns



COMPONENTS OF PREMARITAL PACKAGE



Premarital Screening
and Counseling

Premarital Immunization:

- Advise immunization against rubella at least 3 months before marriage.
- Advise couple to be vaccinated against hepatitis.



COMPONENTS OF PREMARITAL PACKAGE



Premarital Screening
and Counseling

Referral :

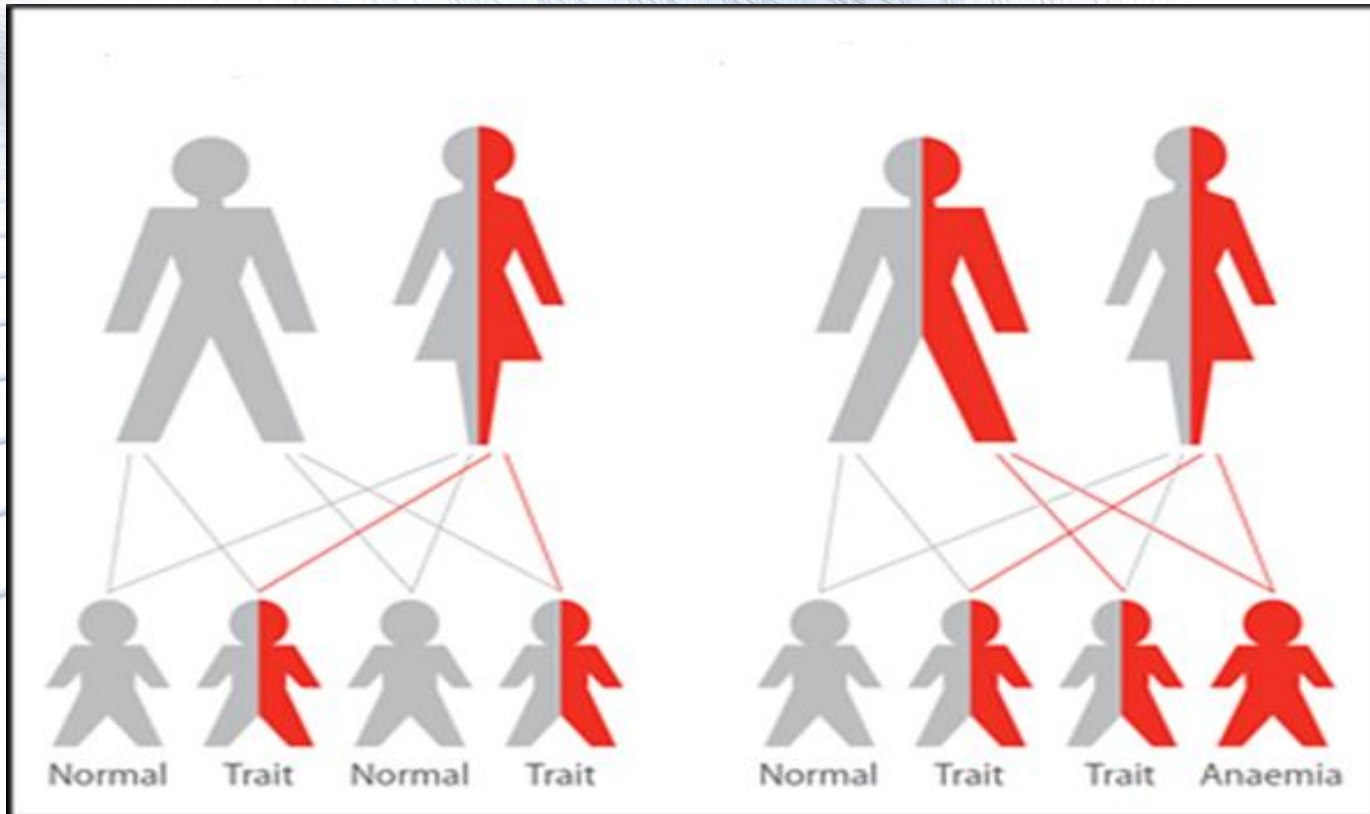
- Genetic counseling services
- Specialist (high risk)

Genetic Counseling Services



Premarital Screening
and Counseling

Sickle cell anemia (SCA):



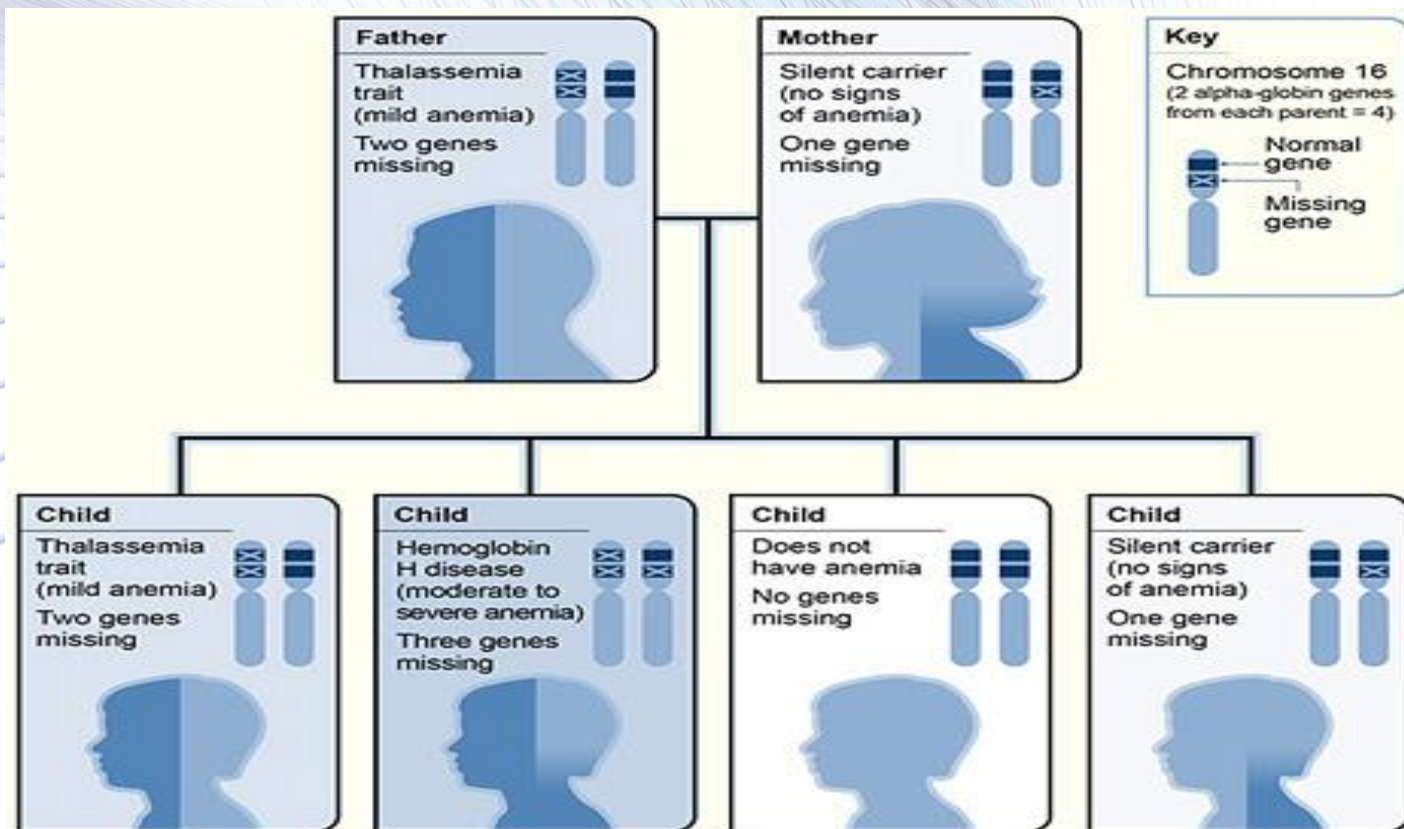
Genetic Counseling Services



Premarital Screening
and Counseling

Thalassemia:

Example of an Inheritance Pattern for Alpha Thalassemia



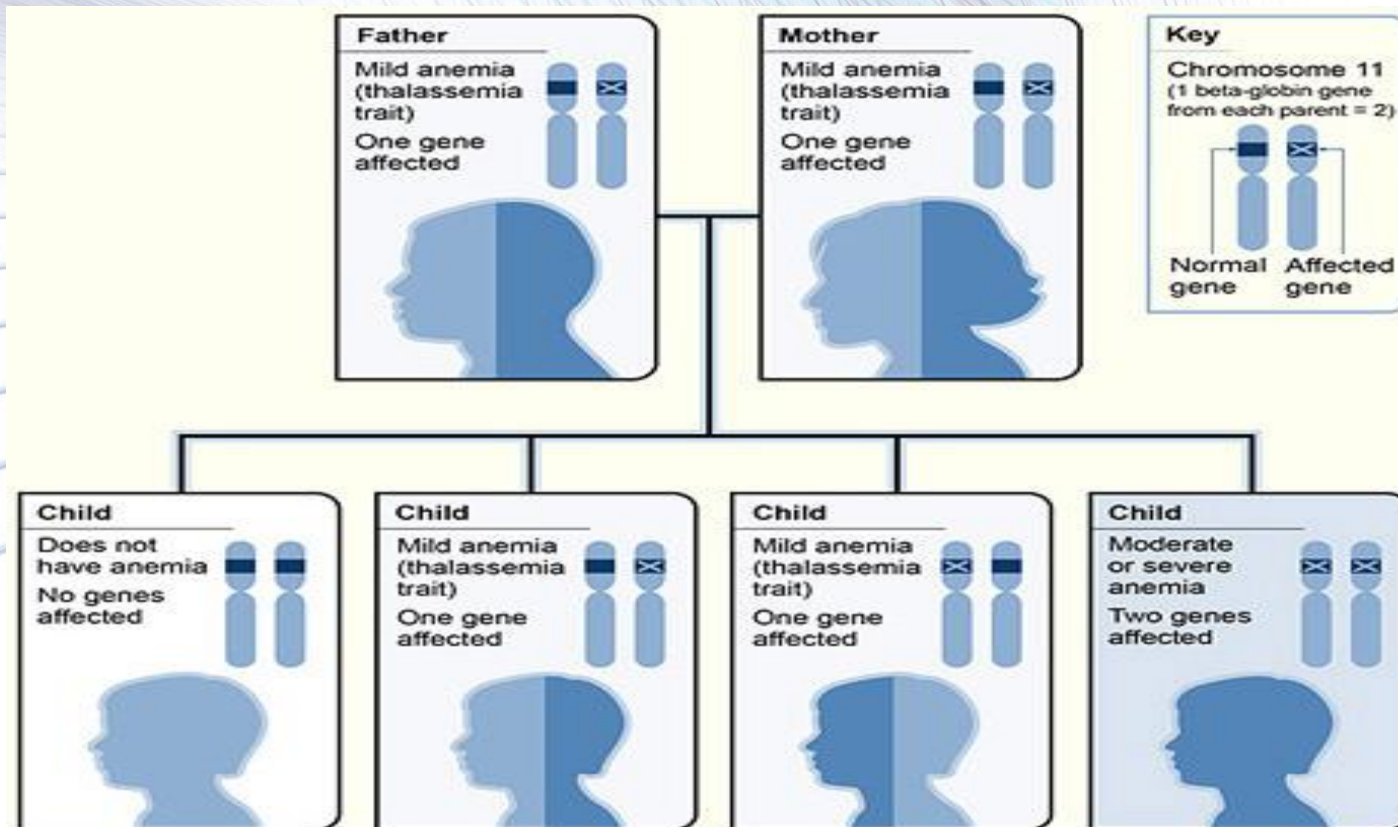
Genetic Counseling Services



Premarital Screening
and Counseling

Thalassemia:

Example of an Inheritance Pattern for Beta Thalassemia



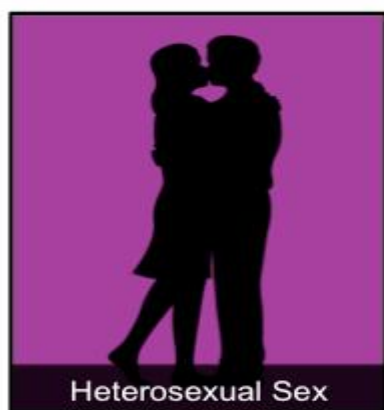
Referral / Specialist



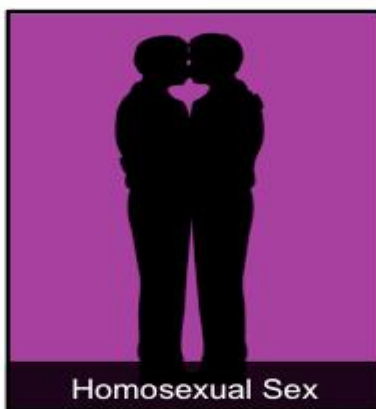
Premarital Screening
and Counseling

Hepatitis :

Hepatitis B & C mode of transmission



Heterosexual Sex



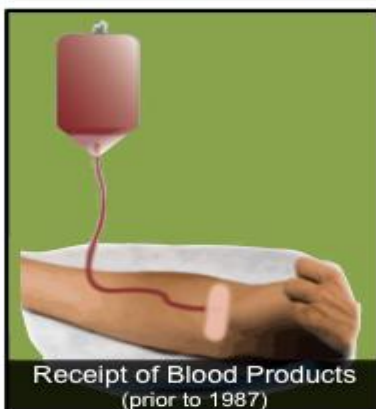
Homosexual Sex



Mother to Child



Sharing Needles
(and equipment)



Receipt of Blood Products
(prior to 1987)



Needlestick Injury

COMPONENTS OF PREMARITAL PACKAGE



Premarital Screening
and Counseling

Recordkeeping :

Fill the result of counseling , examination & investigation

Confidentiality issues !!

٢٨٧٥
تقرير مشورة وراثية

شهادة (توافق الطرفين)

فحص مكبري لأمراض الدم الوراثية (الأنيميا المنجلية والتلاسيميا) لكل من:

الاسم الأول: الأب: الجد: العائنة:

وال المدلية: ١ ٥ ٨ ٧ ٤ ٤ ٢ ١

وال المدلية: ١ ٥ ٨ ٧ ٤ ٤ ٢ ١

الفحص المخبري:
توافق بين الشاب والفتاة ولا يوجد بياض الله مسطر (إصابة الذرية بأمراض الدم الوراثية
(الأنيميا المنجلية والتلاسيميا))

LABORATORY RESULT			
TEST	NORMAL RANGE	RESULT	REMARKS
RBCX10UL:	M:4.7_6.1-----F:4.2_5.4	4.33	
Hb g/dl:	M:12_17g/dl-----F:12_16g/dl	13.2	
Hct:	M:12_17g/dl	30.3	
MCV:	M:80_96fl	70.2	
MCH Pg:	27_32pg	30.2	
MCHC g/dl:	33_37g/dl	42.3	
RDW:	11.5_14.5%		
Retic:	0.5_205%red celle		
Sickling Test:	Positive Or Negative	Negative	
Hb A:	96_98%	97.3	
Hb A2:	1_3.2%	2.5	
HbF:	0.5_1%	0.2	

Abnormal Hemoglobin			
HEMOGLOBIN	PATIENT RESULT	HEMOGLOBIN	PATIENT RESULT
Hbs:		Hb J:	
Hb C:		Hb O-Arab:	
Hb D:		Hb H:	
HbG:		Hb Barts:	
Other Hb:		Other Test:	

PREMARITAL SCREENING VIROLOGY TESTS			
HBsAg Screening by ELISA	Negative	Anti -- HIV Screening	Negative
Anti HCVScreening by ELISA	Negative	HIV Confirmatory by Western Blot Method	
HCV Confirmatory by RIBA			

-COMMENT

CONCLUSION



Premarital Screening
and Counseling

- *Pre-marital screening program is one of the national programs that carries community & financial importance.*
- *It is compulsory , free for all citizens.*
- *It is blood test*
- *Negative results does not indicate healthy offspring.*
- *Couples have the choice to proceed to marriage whatever the result is.*



THANK YOU 😊

